

**From:** [Howe, Robert F](#)  
**To:** [Hartzell, Sharon](#); [Brian Jankauskas \(brian.jankauskas@dec.ny.gov\)](#); [Rapiejko, Andrew \(Andrew.Rapiejko@suffolkcountyny.gov\)](#)  
**Cc:** [Dorsch, William R](#); [Paquette, Douglas E](#); [Remien, Jason](#); [Granzen, Gerald \(BHSO\)](#); [Sundin, Nora](#)  
**Subject:** RE: PFAS results at boundary?  
**Date:** Monday, May 06, 2019 12:06:24 PM  
**Attachments:** [Fig 1 Phase 3 PFAS 112018.pdf](#)  
[Fig 2 PFAS MW GP South Boundary 02-20-19.pdf](#)

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Sharon and (Brian and Andy),

In response to your email below regarding PFAS boundary well data, below is a summary of available data for groundwater extraction wells and monitoring wells that are located along the BNL perimeter. Only one well, 061-05, had a combined PFOS and PFOA concentration that exceeded the 70 ng/L HAL (data highlighted below).

Regarding the news coverage, the May 1<sup>st</sup> Newsday article stated tests have shown high levels of PFAS on the base and around the perimeter. While we have identified high levels of PFAS in the middle of the site at two of the source areas (i.e., the former and current firehouses), to date we have not seen high levels along the perimeter. As noted above and below, only one well 061-05, located near the BNL eastern boundary, had a combined PFOS/PFOA concentration above 70 ng/L. This result was 122.9 ng/L.

The data collected during implementation of the *Phase 3 Work Plan* were included in the *Phase 3 Addendum* that was sent to the agencies March 8<sup>th</sup>. BNL is currently installing the 11 temporary Geoprobe wells along the boundary as outlined in the *Phase 3 Addendum*, and we will start to receive analytical results in mid-May. Hopefully we will have some data to share during the June IAG teleconference. All available PFAS monitoring data will be provided in the *2018 Groundwater Status Report*.

**Phase 3 Monitoring Results, Presented in the Phase 3 Work Plan Addendum (Locations shown on attached Figure 1):**

*William Floyd Well Field Area Sentinel Monitoring Wells*

- The two primary PFAS of concern, PFOS and PFOA, were not detected in sentinel wells 109-03 and 109-04

*OU III Western South Boundary Extraction Wells*

- PFOS was detected in three of the six Western South Boundary extraction wells and PFOA was detected in two of the wells.
- The maximum PFOS and PFOA concentrations were detected in extraction well WSB-1 at 5.7 ng/L and 3.2 ng/L, respectively.
- The maximum combined PFOS/PFOA concentration was 8.9 ng/L in well WSB-1.

*OU III South Boundary Extraction Wells*

- PFAS compounds were detected in all seven OU III South Boundary extraction wells.
- The maximum PFOS concentration was detected in extraction well EW-5 at 18.9 ng/L, and the highest PFOA concentration was detected in extraction well EW-7 at 16.4 ng/L.
- The maximum combined PFOS/PFOA concentration was 31.1 ng/L in well EW-5.

*OU I South Boundary Extraction Wells*

- PFAS compounds were detected in both extraction wells.
- The maximum PFOS concentration was detected in extraction well EW-2 at 7.3 ng/L, and the highest PFOA concentration was detected in extraction well EW-1 at 5.1 ng/L.
- The maximum combined PFOS/PFOA concentration was 10.7 ng/L in well EW-1.

*OU V Monitoring Wells Downgradient of the STP*

- Well 050-01 located near the BNL eastern boundary had a combined PFOS/PFOA concentration of 33.2 ng/L.
- Well 061-05 (screened from 195-205 feet BGS), located near the BNL eastern boundary, had

a combined PFOS/PFOA concentration of 122.9 ng/L. The individual PFOS and PFOA concentrations were 102 ng/L and 20.9 ng/L, respectively.

- Off-site monitoring well 000-122 (screened from 240-260 feet BGS) had a combined PFOS/PFOA concentration of 29.2 ng/L. The individual PFOS and PFOA concentrations were 19.5 ng/L and 9.7 ng/L, respectively.

**Phase 3 Addendum Monitoring Results (Locations shown on attached Figure 2):**

*33 Western South Boundary and OU III South Boundary Monitoring Wells*

- PFOS and/or PFOA were detected in 26 of the 33 monitoring wells. Combined PFOS/PFOA concentrations in 19 of the 26 wells with detections were <10 ng/L.
- The maximum PFOS concentration was detected in well 122-10 at 65.6 ng/L, and the highest PFOA concentration was detected in well 122-31 at 24 ng/L.
- The maximum combined PFOS/PFOA concentration was 69.2 ng/L in well 122-10.

If you have any additional questions, please let me know.

Thanks Bob

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**From:** Hartzell, Sharon <[hartzell.sharon@epa.gov](mailto:hartzell.sharon@epa.gov)>

**Sent:** Friday, May 3, 2019 4:13 PM

**To:** Howe, Robert F <[howe@bnl.gov](mailto:howe@bnl.gov)>

**Subject:** PFAS results at boundary?

Hi Bob,

I just wanted to touch base on what sampling results we have so far for PFAS. Do we have any results from boundary wells, and if so would you be able to send them to me? If I have received them I'm not sure where I have them saved.

In some of the news coverage on the water testing, they reference high levels on the base and around the perimeter, but I was unclear whether we've actually seen exceedances at the perimeter so far.

Thanks,

Sharon

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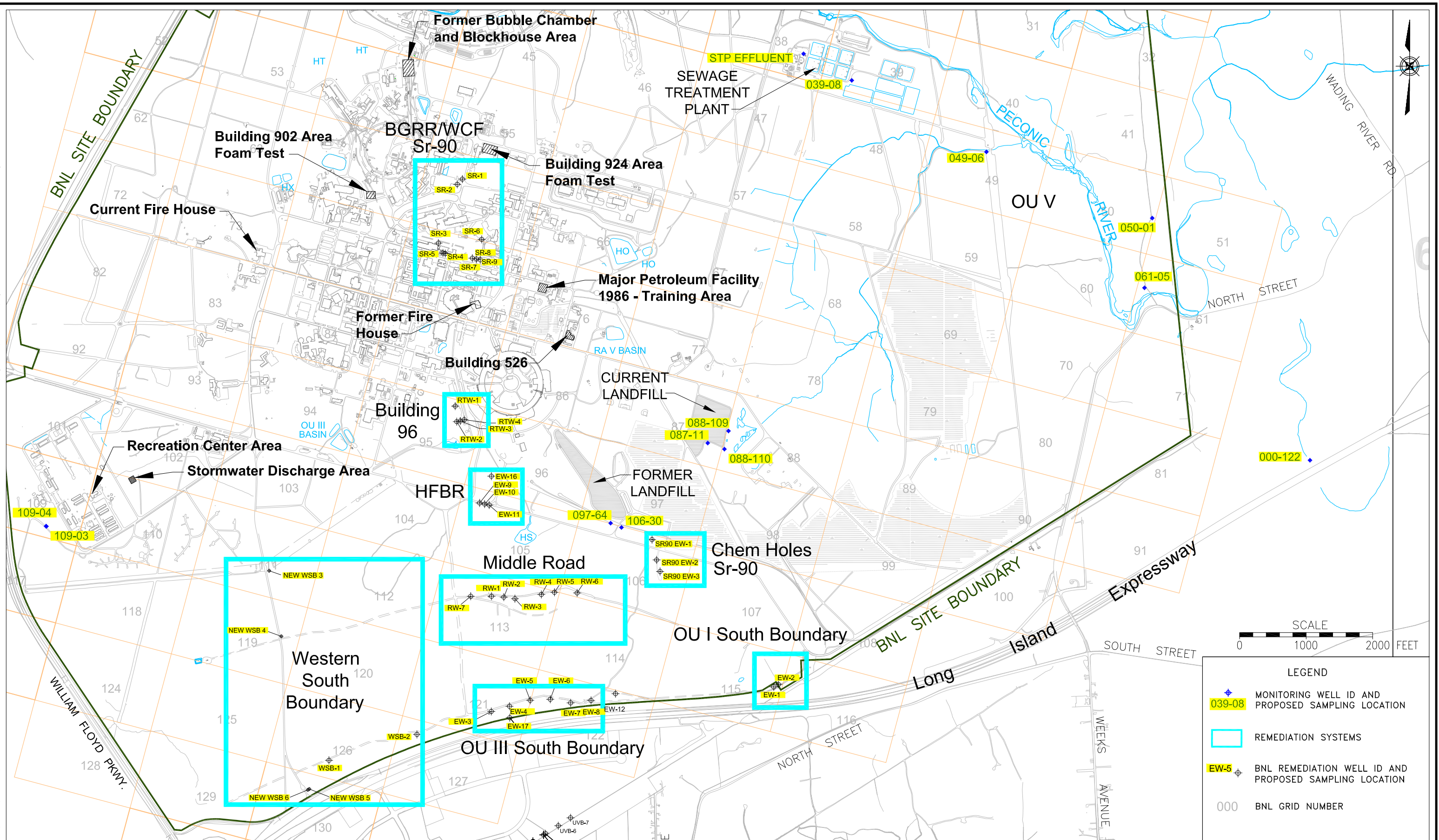
Sharon Hartzell

Remedial Project Manager

U.S. EPA Region 2 – New York, NY

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"...so that those who live after may have clean earth to till." – J.R.R. Tolkien



TITLE:

## PHASE 3 PFAS SAMPLE LOCATIONS

2018 PFAS CHARACTERIZATION

DWN:
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AJZ

VT:HZ.:
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DATE:

11/20/18

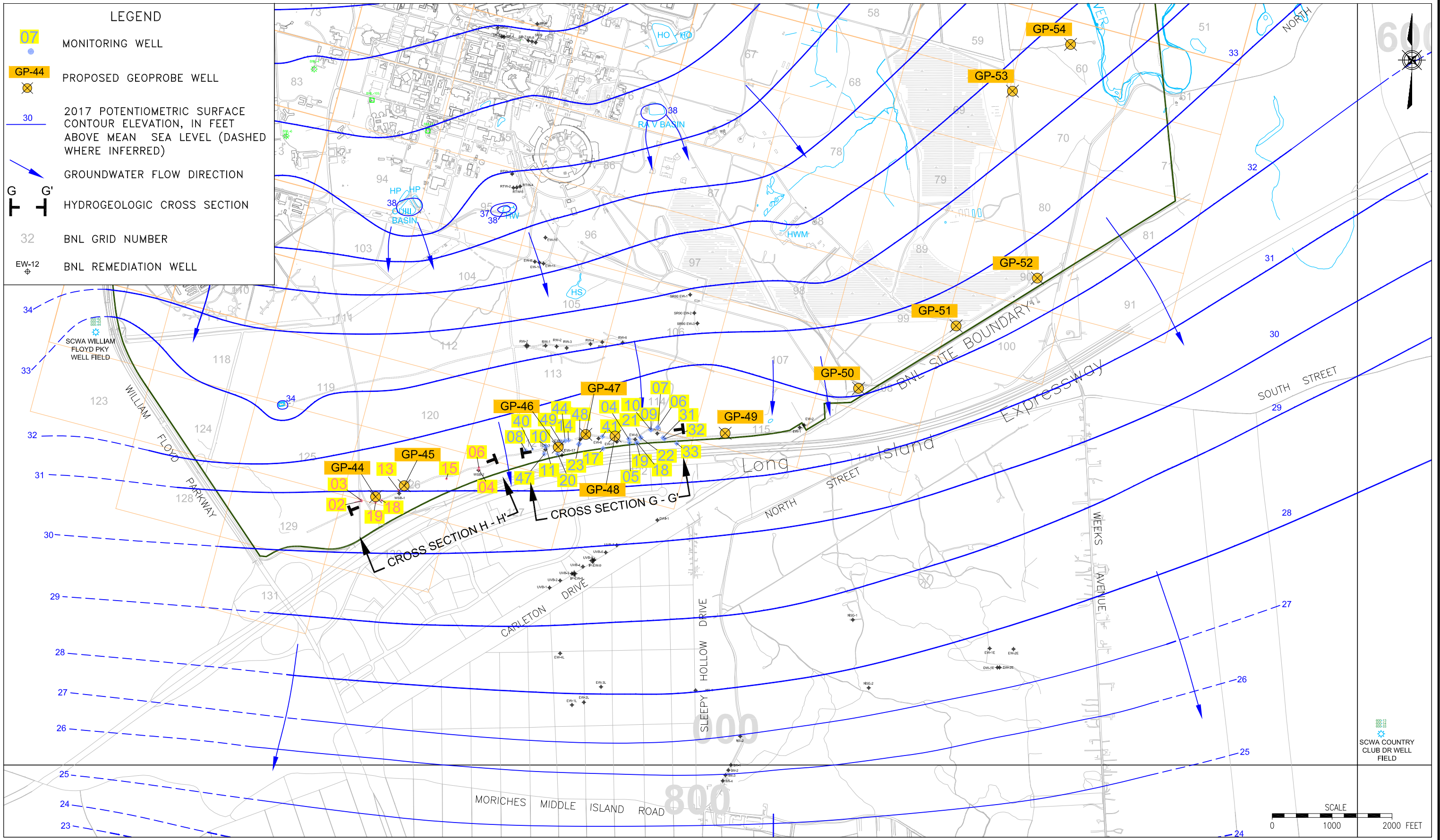
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FIGURE NO.:



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**BROOKHAVEN**  
NATIONAL LABORATORY

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

PROPOSED MONITORING WELL SAMPLING AND GEOPROBE LOCATIONS  
- PFAS CHARACTERIZATION ALONG BNL SITE BOUNDARY

2019 PFAS PHASE 3 ADDENDUM

DWN:  
AJZ

VT:HZ.:  
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DATE:  
02/20/19

PROJECT NO.:  
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CHKD:  
DEP

APPD:  
DEP

REV.:  
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NOTES:  
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FIGURE NO.:

2